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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,573	06/17/2005	Grant Berent Jacobsen	01435-0211	4510

22852 7590 09/22/2006

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EXAMINER

RABAGO, ROBERTO

ART UNIT PAPER NUMBER

1713

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/539,573

**Applicant(s)**

JACOBSEN ET AL.

**Examiner**

Roberto Rábago

**Art Unit**

1713

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/17/2005</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobsen et al. (WO 97/43323).

The reference discloses in Example 7 a gas-phase fluidized bed polymerization of ethylene/butene with a supported catalyst comprising dried silica treated with triethylaluminum, trihexylaluminum, boron compound, and finally with the required metallocene. Missing from the reference is a measurement of the MWD and melt strength of claim 20; however, these properties would appear to be inherent because: (a) applicants have claimed broad ranges of conventional values, and (b) the reference example has used substantially the same methods and catalyst as those described in applicants' specification. The burden of proof is shifted to applicants to show that the reference process would fail to make a polymer with the required properties.

3. Claims 1-3, 5-9, 13-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Carnahan et al. (US 6,475,945).

The reference discloses in Examples 1 and 3 fluidized bed olefin copolymerization using a catalyst made by contacting dried silica with two organoaluminum compounds and the required metallocene. Example 1 further includes an embodiment with a boron compound. Example 1 includes MMAO, which is made by contacting MAO with another trialkylaluminum, typically triisobutylaluminum, and is necessarily a mixture of differently substituted aluminoxanes as well as trialkylaluminum. Missing from the reference is a measurement of the MWD and melt strength of claim 20; however, these properties would appear to be inherent because: (a) applicants have claimed broad ranges of conventional values, and (b) the reference example has used substantially the same methods and catalyst as those described in applicants' specification. The burden of proof is shifted to applicants to show that the reference process would fail to make a polymer with the required properties.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsen et al. (WO 97/43323).

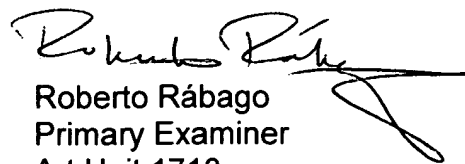
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The parent claims are discussed with respect to this reference above. Missing from the previously cited example is the use of fluidized bed conditions. However, one of ordinary skill in the art would be motivated to use such systems because the reference suggests gas phase polymerization in the paragraph bridging pp. 85-86. A fluidized bed reactor would be immediately envisaged from the suggestion to use gas phase conditions because fluidized bed reactors are among the most commonly used gas phase systems.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR

September 15, 2006